

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A multicarrier communication system, comprising:
a transmitter having channel knowledge of a communication link to select a subcarrier that suffers from channel impairments from a plurality of subcarriers, wherein the selected subcarrier is punctured prior to transmission by placing no modulated data or information in the selected subcarrier after the selection of the subcarrier to maintain or reduce transmitted power of the selected subcarrier, and when transmitted power of the selected subcarrier is reduced the transmitted power is re-allocated to information carrying subcarriers to increase the signal-to-noise ratio of the communication link.
2. (Original) The system of claim 1 wherein the transmitter is an Orthogonal Frequency Division Multiplexing (OFDM) transmitter.
3. (Original) The system of claim 1 wherein the channel knowledge is determined by the transmitter.
4. (Original) The system of claim 1 further comprising:
a receiver coupled to the transmitter where the receiver determines the channel knowledge.
5. (Previously Presented) The system of claim 1 wherein the channel knowledge is selected from multipath fading and in-band interference.
6. (Original) The system of claim 1 wherein the subcarrier is punctured by placing energy in the subcarrier without including any modulated data or information.

7. (Original) The system of claim 1 wherein the subcarrier is punctured and a Peak-to-Average Power Ratio (PAPR) of an OFDM symbol is reduced.

8. (Original) The system of claim 1 wherein the subcarrier is punctured by placing no energy in the punctured subcarrier and a power level for remaining subcarriers is maintained.

9. (Canceled).

10. (Original) The system of claim 1 wherein the subcarrier is punctured to avoid in-band spectral interference.

11. (Currently Amended) A communications device comprising:
a transmitter to perform multi-carrier modulation and having channel knowledge of a communication link to select a carrier from a plurality of carriers to puncture prior to transmission by placing no modulated data or information in the selected subcarrier after the selection of the subcarrier to maintain or reduce transmitted power of the selected subcarrier, and when transmitted power of the selected subcarrier is reduced the transmitted power is re-allocated to information carrying subcarriers to increase the signal-to-noise ratio of the communication link.

12. (Original) The communications device of claim 11 wherein the carrier is punctured by placing energy in the carrier without including any modulated data or information.

13. (Original) The communications device of claim 11 wherein the carrier is punctured and a Peak-to-Average Power Ratio (PAPR) of a symbol is reduced.

14. (Original) The communications device of claim 11 wherein the carrier is punctured by placing no energy in the punctured carrier and a power level for remaining carriers is maintained.
15. (Original) The communications device of claim 11 wherein the carrier is punctured and power is redistributed to remaining carriers.
16. (Original) The communications device of claim 11 wherein the carrier is punctured to avoid in-band spectral interference.
17. (Currently Amended) A system comprising:
 - an analog transceiver having at least one receiver chain to demodulate a subcarrier;
 - a processor coupled to the at least one receiver chain to select a subcarrier from a plurality of subcarriers to puncture prior to transmission based on channel knowledge of a communication link where no modulated data or information is placed in the selected subcarrier after the selection of the subcarrier to maintain or reduce transmitted power of the selected subcarrier, and when transmitted power of the selected subcarrier is reduced the transmitted power is re-allocated to information carrying subcarriers to increase the signal-to-noise ratio of the communication link; and
 - a Static Random Access Memory (SRAM) memory coupled to the processor.
18. (Original) The system of claim 17, wherein the processor further includes:
 - an Orthogonal Frequency Division Multiplexing (OFDM) transmitter having a carrier puncturing circuit with an input to receive channel knowledge information.
19. (Original) The system of claim 18 wherein the carrier puncturing circuit receives channel knowledge information about in-band spectral interference to puncture a subcarrier.

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20. (Original) The system of claim 17 wherein the processor further includes:
an Orthogonal Frequency Division Multiplexing (OFDM) receiver having a
carrier depuncturing circuit that receives information about subcarriers to skip.